



## REMARKS

in order to place the instant application in better form for consideration on appeal, the subject matter of Claim 20 has been incorporated into Claim 18. Since this amendment results in the cancellation of a claim and places the instant application in better form for consideration on appeal, entry thereof is deemed proper under 37 CFR 1.116(b). Favorable consideration is respectfully solicited.

Respectfully submitted,

  
Terryence F. Chapman

TFC/smd

FLYNN, THIEL, BOUTELL  
& TANIS, P.C.  
2026 Rambling Road  
Kalamazoo, MI 49008-1631  
Phone: (269) 381-1156  
Fax: (269) 381-5465

Dale H. Thiel	Reg. No. 24 323
David G. Boutell	Reg. No. 25 072
Ronald J. Tanis	Reg. No. 22 724
Terryence F. Chapman	Reg. No. 32 549
Mark L. Maki	Reg. No. 36 589
David S. Goldenberg	Reg. No. 31 257
Sidney B. Williams, Jr.	Reg. No. 24 949
Liane L. Churney	Reg. No. 40 694
Brian R. Tumm	Reg. No. 36 328
Tricia R. Cobb	Reg. No. 44 621
Robert J. Sayfie	Reg. No. 37 714

Encl: Marked-Up Amended Claim 18  
Postal Card

136.0112

18. (~~New~~Amended) A method of manufacturing a single crystal diamond p-type semiconductor having a thermal conductivity of from about 26-31 W/cm°K and a boron content not exceeding 100 ppm comprising the steps of:

providing a carbonaceous material containing isotopically purified  $^{12}\text{C}$  or  $^{13}\text{C}$ ;

providing a flux containing a nitrogen getter;

adding boron into the carbonaceous material or/and the flux, or around the carbonaceous material and the flux; and

diffusing the carbonaceous material into the flux under a high temperature and pressure to form a boron-doped single crystal diamond p-type semiconductor on a seed crystal diamond.

RECEIVED  
APR 4 2011  
TC 1700